REMARKS

Claims 29-44 are pending in the application.

Claims 29 and 40 are amended

Claims 29-44 are rejected. This rejection is traversed.

DETAILED OFFICE ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 29-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Kageyama et al. US 5303336.

3.   Regarding claim 29, Kageyama et al. teaches a method of customizing a print job, the method comprising the steps of: receiving an input of a print job in a printer (column 4,lines 65-67); determining whether said print job has an embedded customization identifier (column 5,lines 1-4); when said print job has said customization identifier; (1) locating in a database of different plug-ins, one or more plug-ins associated with said customization identifier (column 5,lines 7-12); (2) executing said print job, said executing including applying said associated one or more plug-ins to said print job to customize said print job (column 5,lines 13-32); and when said print job lacks said customization identifier, executing said print job without using said one or more plug-ins (it is inherent to the Examiner that if a print job does not provide an identifier then the printer will still print the information).

4.   Regarding claim 30, Kageyama et al. teaches applying raster image processing using a plurality of interpreters (column 5,lines 1-4).

5.   Regarding claim 31, Kageyama et al. teaches customizing said associated one or more plug-ins (column 7,lines 23-28)

6.   Regarding claim 32, Kageyama et al. teaches wherein said executing of said print job has a start and an end and said applying is at one or more of said start, said end and within each of a plurality of images of said print job (column 10,lines 45-57).

7.   Regarding claim 33, Kageyama et al. teaches wherein said executing of said print job has a start and an end and said applying is at both said start and said end (column 10, lines 45-57).

8.   Regarding claim 34, Kageyama et al. teaches wherein said applying is within each of a plurality of images of said print job (column 10, lines 58-67-column 11,lines 1-3).

9.   Regarding claim 35, Kageyama et al. teaches prior to receiving: selecting one of a plurality of different preferential document-processing features, each said preferential document-processing feature being associated with a different set of one or more of the plug-ins of said database; and embedding said customization identifier in said print job, said customization identifier being associated with the respective said set of one or more plug-ins associated with said selected preferential document-processing feature (column 4,lines 46-51).

10.   Regarding claim 36, Kageyama et al. teaches embedding instructions with said customization identifier and using said instruction during said applying (column 4,lines 46-51).

11.   Regarding claim 37, Kageyama et al. teaches wherein said print job has a plurality of types of customization data, said data including said customization identifier (column 4,lines 46-51), and said determining further comprises ascertaining a highest type in a precedence order of: (1) customization data embedded by a data processing system downloader, (2) customization data embedded by a data processing system printer driver, and (3) customization data embedded by said printer; and wherein said locating and said applying use the ascertained said customization data of said highest type (column 4,lines 46-51).

12.   Regarding claim 38, Kageyama et al. teaches wherein: said method further comprises accepting a user selection via a user interface of a data processing system separate from said printer when said plurality of types of customization data includes customization data embedded by said data processing system; and said method further comprises accepting a user selection via a user interface of said printer when said plurality of types of customization data includes customization data embedded by said printer (column 14,lines 63- column 15, lines 1-3).

13.   Regarding claim 39, Kageyama et al. teaches wherein said print job has a dictionary having a plurality of entries, each said entry having an associated printing

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feature, and said one or more plug-ins reference one of said entries to change an on/off status of the respective said printing feature (column 7,lines 60-65).

14.   Regarding claim 40, the steps of method claim 29 perform all of the structural elements of system claim 40. Thus, claim 40 is rejected for the same reasons discussed in the rejection of claim 29.

15.   Regarding claim 41, the steps of method claim 30 perform all of the structural elements of system claim 41. Thus, claim 41 is rejected for the same reasons discussed in the rejection of claim 30.

16.   Regarding claim 42, the steps of method claim 31 perform all of the structural elements of system claim 42. Thus, claim 42 is rejected for the same reasons discussed in the rejection of claim 31.

17.   Regarding claim 43, the steps of method claim 38 perform all of the structural elements of system claim 43. Thus, claim 43 is rejected for the same reasons discussed in the rejection of claim 38.

18.   Regarding claim 44, Kageyama et al. teaches wherein said downloader embeds instructions with said customization identifier, said instructions being usable by said printer during said applying (column 4,lines 46-51 and column 5,lines 13-32).

Applicant's Comments On The Office Action

The rejection of the claims in the application is traversed,

The problem presented in the prior art which the present invention solves is the necessity of customizing standard printing formats and systems to special jobs requiring different modifications to the software for each special job. If multiple customers have special software modifications, the servicing and troubleshooting of printer problems may become uneconomical for the customers, the provider, or both. Training of technicians and contractual obligations to provide quality assurance and certification tests for a software product in such situations are costly and difficult to implement. The need therefore existed for allowing for customization of a standard print product and a print job without modifying the standard printing system in a non-uniform manner.

According to the present invention there is provided a method of customizing a print job, the method comprising the steps of: receiving an input of a

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print job in a standard format in a printer; determining whether said print job has an embedded customization identifier; when said print job has said customization identifier: (1) locating in a database of different plug-ins compatible with said standard format, one or more plug-ins associated with said customization identifier; (2) executing said print job, said executing including applying said associated one or more plug-ins to said print job to customize said print job; and when said print job lacks said customization identifier, executing said print job without using said one or more plug-ins. Further according to the present invention there is provided a system of customizing a print job, the system comprising: a printer capable of receiving the print job in a standard format, said printer including: a database of different plug-ins compatible with said standard format; a customization detector determining whether said print job has an embedded customization identifier; a plug-in selector locating in said database one or more plug-ins associated with said customization identifier, when said print job has said embedded customization identifier; one or more interpreters executing said print job, executing including applying said associated one or more plug-ins to said print job to customize said print job, when said print job has said embedded customization identifier, said executing lacking said applying of said associated one or more plug-ins, when said print job lacks said customization identifier. The invention thus satisfies the need for allowing for customization of a standard print product and a print job without modifying the standard printing system in a non-uniform manner.

It is submitted that claims 29 – 44 are novel and nonobvious and clearly patentable over Kageyama. Kageyama discloses a printing system in which a plurality of terminals for creating document data with different printing protocols or character codes are connected to a print server for printing the document data. Each terminal includes a device adding an identifier indicating a printing protocol or character code of the document data to be sent to be printed. The print server includes several printing protocols which correspond to the several printing protocols generated by the terminals. When a print job is received by the print server, the identifier for that job is discriminated and the appropriate printing protocol is applied to print that job. There is no disclosure in Kageyama of a printer capable of receiving the print job in a standard format, the printer including a database of different plug-ins compatible with the standard format. There is no disclosure in Kageyama of providing a customization identifier with the print job in standard format which is used in locating in a database of different plug-ins compatible with the standard format, one or more plug-ins associated
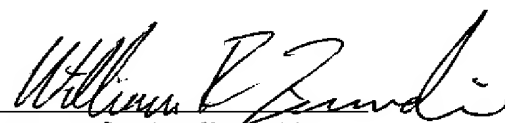
with the customization identifier which are used in executing the print job in accordance with the customized plug in software. The identifier in Kageyama is not used to identify plug in software which is compatible with the standard print format of the print job, rather it is generated by the terminal originating the print job to identify the print protocol of the job. The printer then matches the specific print protocol software to the print job. There is no modification of the print software by the identification process as in the claimed invention. The examiner is challenged on the statement that "it is inherent to the Examiner that if a print job does not provide an identifier then the printer will still print the information." To the contrary, in Kagemaya, if there is no identifier from the originating terminal identifying the print protocol used, the printer will not print the print job since it will not know what protocol to use.

Claims 29 – 44 are clearly patentable over the cited art and should be allowed.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,

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